

Lead Line Pressure Swichgage® Instrument Model PT167EX 4-1/2 in. (114 mm) Diameter Dial

The Murphy PT167EX is a pressure Swichgage instrument connected to a threaded pressure diaphragm housing. The Swichgage instrument is enclosed in an explosion-proof case and is CSA rated for Class I, Division 1, Groups C and D.

A Swichgage instrument is a pressure-indicating gage with adjustable low and high pressure limit switches. When the gage pointer touches the low or high limit switches, an electrical circuit is completed which can operate alarms and/or shut down equipment.

The 2 NPT, sealed diaphragm housing is attached directly to the Swichgage connection. The diaphragm housing is filled with a silicone fluid so that pressure against the diaphragm causes the Swichgage instrument to respond. The housing seals the Swichgage sensing element from the medium being measured.

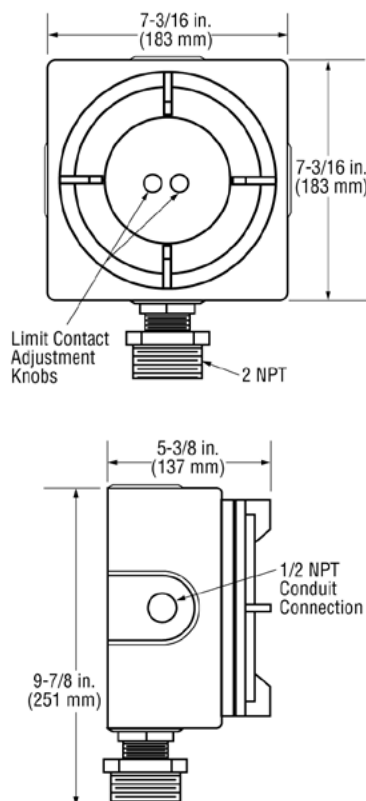
Applications include highly viscous liquids such as crude oil on lead line applications. Other applications have included asphalt, sludge, abrasive materials, etc.



* The PT167EX is CSA listed for ranges 100 to 5000 psi (689 kPa to 34.5 MPa) [6.89 to 344.74 bar].

† Products covered by this bulletin comply with EMC Council directive 89/336/EEC regarding electromagnetic compatibility as noted.

Dimensions



Specifications

Case: Explosion-proof, sand cast aluminum. Lens is removable. CSA Listed for Class I, Division 1, Groups C and D.

Contact Rating: 1 A, 125 VAC

Dial: 4-1/2 in. (114 mm) white on black, dual scaled psi/kPa. Other dial configurations available. Consult factory.

Ranges: See How to Order

Gage Accuracy: ±3% full scale (± 6% Full Scale for 100 and 160 psi ranges), 200 PSI 6-3-6 (6% in the first and last 1/4 of scale, and 3% in the mid 1/2)

Process Connection: 2 NPT

Maximum Pressure: 30% overpressure

Diaphragm Housing: Plated steel, Ni-Span®; silicon filled

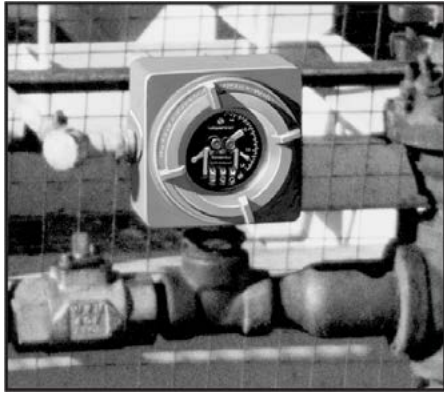
Diaphragm Fluid: Silicone 200

Shipping Weight: 16.5 lb (7.5 kg)

Shipping Dimensions: 12 x 12 x 9 in. (305 x 305 x 229 mm)

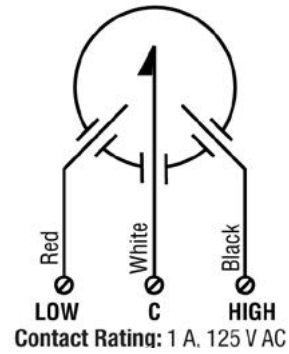
Typical Installation

This photo shows the PT167EX installed in a lead line. For optimum effectiveness, the PT167EX should be installed ahead of all other devices or valves. By positioning it immediately adjacent to the well outlet, the



Swichgag instrument monitors the entire lead line, sensing any blockage whether build up of sludge in the line or an accidental closed valve. The pressure transmitter threads into a 2 NPT T on the lead line.

Internal Wiring



How to Order

Options listed below. All configurations may not be available. Call your sales representative or Enovation Controls for more information.

PT167EX -

Bourdon Tube Socket—Material/Size			
Specify	Tube/Socket Material	Tube Type	Range Selection Limits psi (MPa) [bar]
A	Grade A Phosphor Bronze (Tube) Brass (Socket)	C-Tube	Thru 1,000 psi (6.89 MPa) [68.95 bar]
S	316 Stainless Steel (Tube and Socket)	C-Tube	Thru 1,000 psi (6.89 MPa) [68.95 bar]

Ranges			
Specify	vacuum/psi	kPa/MPa	bar
100	0 - 100 psi	0 - 689 kPa	0 - 6.89
160	0 - 160 psi	0 - 1.10 MPa	0 - 11.03
200	0 - 200 psi	0 - 1.38 MPa	0 - 13.78
300	0 - 300 psi	0 - 2.07 MPa	0 - 20.68
400	0 - 400 psi	0 - 2.76 MPa	0 - 27.57
600	0 - 600 psi	0 - 4.14 MPa	0 - 41.36
1000	0 - 1000 psi	0 - 6.89 MPa	0 - 68.95

If specifying range in bar, kPa/MPa or kg/cm², specify appropriate designator after value.
Example: 20B = 20 bar.

B = Bar
K = kPa/MPa
M = kg/cm²

Part Number	Description	Notes
05000610	Tamper-proof Contact Accessory	